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Attorney Docket No.: 2004B032

JUN 08 2007

IN THE CLAIMS

1. (currently amended) A process for reducing naphthalene concentration in a naphthalene containing aromatic fluid, the process comprising hydrogenating at least a portion of the naphthalene in the presence of a Group VIII metal catalyst consisting of palladium at a temperature from 50 °C to 110 °C to form tetrahydronaphthalene.
2. (original) The process of claim 1 wherein the tetrahydronaphthalene is further hydrogenated to decahydronaphthalene.
3. (cancelled)
4. (original) The process of claim 1 wherein the metal catalyst is supported.
5. (original) The process of claim 4 wherein the support is selected from alumina, carbon, silica, and mixtures thereof.
6. (currently amended) The process of claim 5 wherein the metal catalyst ~~comprises~~ consists of palladium on an alumina support.
7. (currently amended) The process of claim 6 wherein the metal catalyst ~~comprises~~ consists of 0.01 wt% to 25 wt% palladium on an alumina support.
8. (currently amended) The process of claim 7 wherein the metal catalyst ~~comprises~~ consists of 0.1 wt% to 1.0 wt% palladium on an alumina support.
9. (currently amended) The process of claim 5 wherein the metal catalyst ~~comprises~~ consists of palladium on a carbon support.
10. (currently amended) The process of claim 9 wherein the metal catalyst ~~comprises~~ consists of 0.01 wt% to 25 wt% palladium on a carbon support.

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11. (currently amended) The process of claim 10 wherein the metal catalyst ~~comprises~~ consists of 0.1 wt% to 1.2 wt% palladium on a carbon support.
12. (currently amended) The process of claim 5 wherein the metal catalyst ~~comprises~~ consists of palladium on a silica support.
13. (currently amended) The process of claim 12 wherein the metal catalyst ~~comprises~~ consists of 0.01 wt% to 25 wt% palladium on a silica support.
14. (currently amended) The process of claim 13 wherein the metal catalyst ~~comprises~~ consists of 0.1 wt% to 1.0 wt% palladium on a silica support.
15. (original) The process of claim 1 wherein the hydrogenation occurs at a temperature from 90 °C to 105 °C.
16. (original) The process of claim 1 wherein the hydrogenation occurs at a pressure from 100 psig to 3500 psig.
17. (original) The process of claim 16 wherein the hydrogenation occurs at a pressure from 250 psig to 500 psig.
18. (original) The process of claim 1 wherein the hydrogenation occurs in a reactor selected from a fixed bed reactor and a batch reactor.
19. (original) The process of claim 1 wherein the naphthalene containing aromatic fluid comprises from at least 0.2 wt% naphthalene.
20. (original) The process of claim 19 wherein the naphthalene containing aromatic fluid comprises from 0.5 wt% to 35 wt% naphthalene.
21. (original) The process of claim 19 wherein the naphthalene containing aromatic fluid comprises from 1 wt% to 30 wt% naphthalene.

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22. (original) The process of claim 19 wherein the naphthalene containing aromatic fluid comprises from 5 wt% to 15 wt% naphthalene.
23. (original) The process of claim 19 wherein the naphthalene containing aromatic fluid comprises from 8 wt% to 12 wt% naphthalene.
24. (original) The process of claim 1 wherein naphthalene conversion to tetrahydronaphthalene is greater than from 85%.
25. (original) The process of claim 24 wherein naphthalene conversion to tetrahydronaphthalene is greater than from 95%.
26. (original) The process of claim 25 wherein naphthalene conversion to tetrahydronaphthalene is greater than from 99%.
27. (original) The process of claim 1 wherein selectivity to tetrahydronaphthalene is greater than from 80%.
28. (original) The process of claim 27 wherein selectivity to tetrahydronaphthalene is greater than from 85%.
29. (original) The process of claim 28 wherein selectivity to tetrahydronaphthalene is greater than from 95%.
30. (original) The process of claim 29 wherein selectivity to tetrahydronaphthalene is greater than from 98%.

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